

Supplementary Material

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**Optimizing GC-ICP-MS for ultra-trace quantification of PBDEs in natural water samples
using species-specific isotope dilution**

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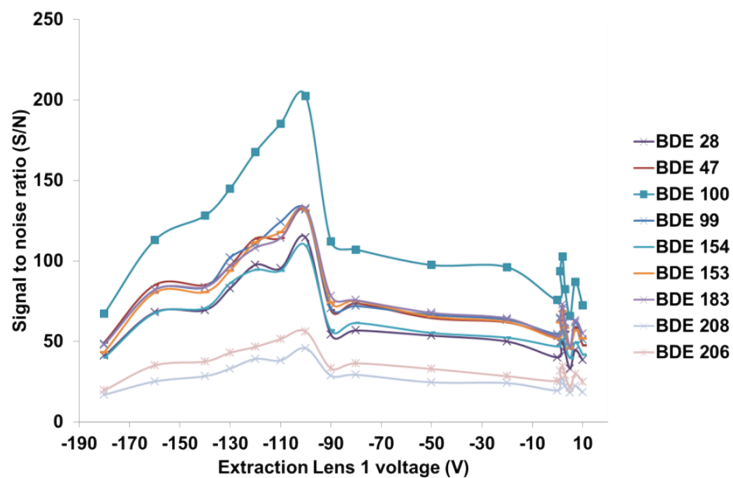
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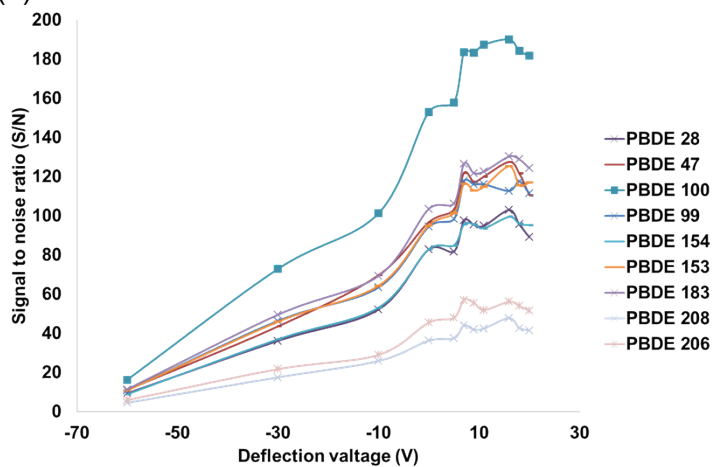
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Figure S1 Effect of (a) the extraction lens 1 (b) the deflection and (c) the plate bias voltage settings on the signal to noise ratio of the selected PBDE congeners when using GC-ICP-MS conditions. Calculations were based on the ^{79}Br signal

(a)



(b)



(c)

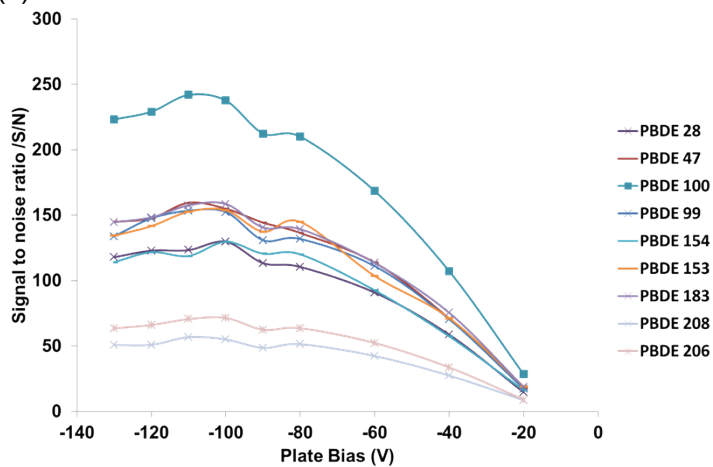


Figure S2 (a) Effect of the octopole bias voltage settings on the signal to noise ratio of the selected PBDE congeners when using GC-ICP-MS conditions. Calculations were based on the ^{79}Br signal. The quadrupole bias was always set to a 2 V more positive voltage. **(b)** Effects of the He cell gas flow rate at an octopole/quadrupole bias setting of -16/-14 V respectively.

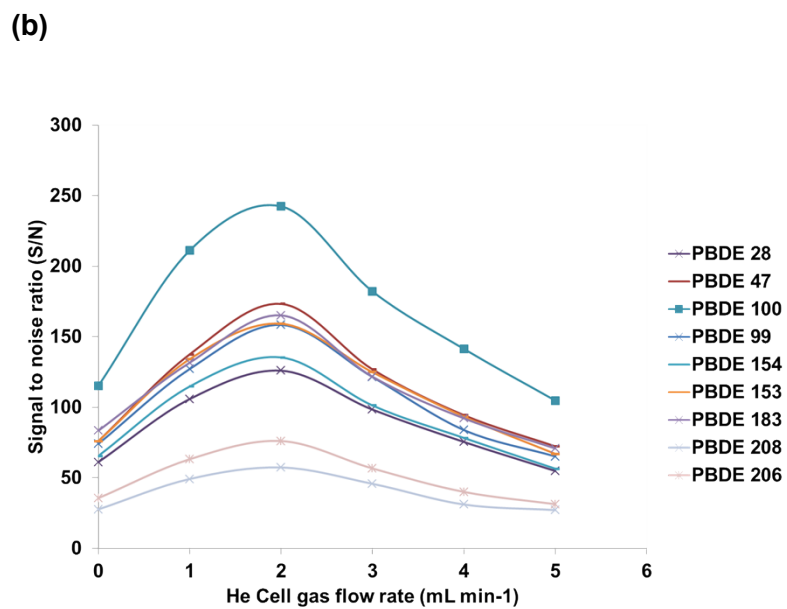
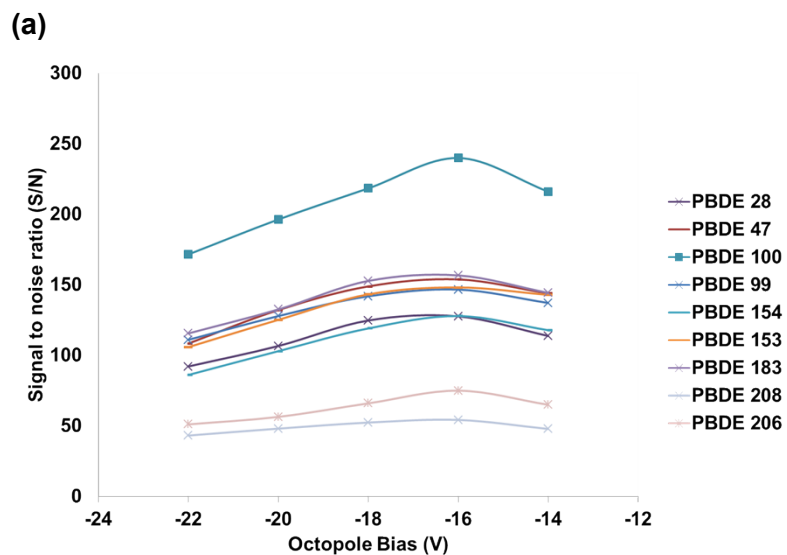
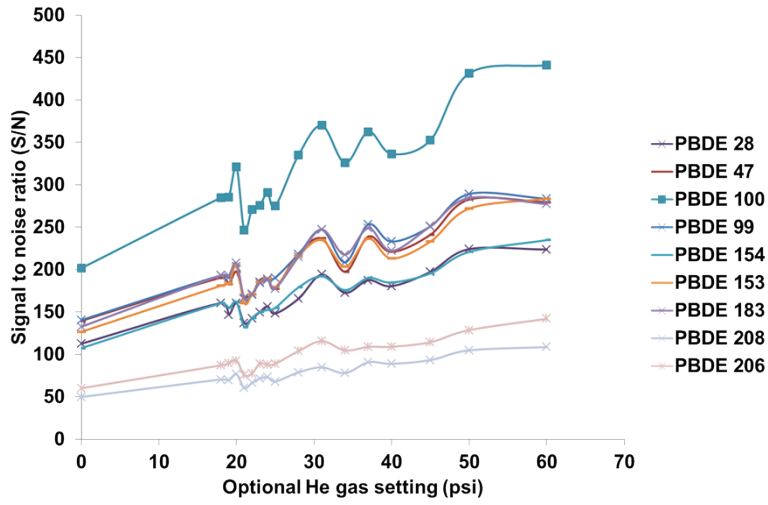


Figure S3 Optimisation of the optional plasma gas flow for **(a)** Helium and **(b)** Nitrogen

(a)



(b)

